

Table A-A, Summary of animal classes in IRW study area showing their numbers and their contribution to wet manure, its components, and fecal coliform. Values have then been adjusted for composting based on stockpiling of manure through piles (dairy), lagoons (swine), and in-house composting (poultry) indicating the adjustment factors. (Refer to Notes in Appendix G for Sources)

Quantities before adjustment are made				Direct or Indirect Deposit/Composting			Quantities adjusted for Indirect Deposit/Composting							Percent Reduction
	Arkansas Total	Oklahoma Total	Study Area Total	Method of Deposit/Harvest	Delay Factor		Wet Manure Tons	N Dry Lbs	Dry Lbs	K Dry Lbs	Total coliform	Fecal coliform	Fecal Streptococcus	
Farms by size , All farms	120,680	200,637	321,317											
Percent of county farms in zip code area:	0.00%	0.00%												
Land in farms, acres	201,133	334,395	535,528											
Cattle and calves inventory, number	0	0	0											
Whitetail Deer population	11,077	18,333	29,400	100.00%	0.00%									
Wet Manure Weight, Ton:	8,045	13,376	21,421				21,421							0.00%
N, DRY LBS	181,020	300,955	481,975					481,975						0.00%
P, DRY LBS	28,159	46,815	74,974						74,974					0.00%
K, DRY LBS	120,680	200,637	321,317							321,317				0.00%
Total coliform, x10 ¹⁰ cfu	0	0	0		0.00%						0			0.00%
Fecal coliform, x10 ¹⁰ cfu	201,133	334,395	535,528		0.00%							535,528		0.00%
Fecal streptococcus, x10 ¹⁰ cfu	0	0	0		0.00%								0	0.00%
Wild Turkey population	1,762	1,802	3,564	100.00%	0.00%									
Wet Manure Weight, Ton:	227	232	459				459							0.00%
N, DRY LBS	5,981	6,117	12,098					12,098						0.00%
P, DRY LBS	2,219	2,269	4,488						4,488					0.00%
K, DRY LBS	2,315	2,368	4,683							4,683				0.00%
Total coliform, x10 ¹⁰ cfu	0	0	0		0.00%						0			0.00%
Fecal coliform, x10 ¹⁰ cfu	5,981	6,117	12,098		0.00%							12,098		0.00%
Fecal streptococcus, x10 ¹⁰ cfu	0	0	0		0.00%								0	0.00%
Geese population, goose days in study area	68,434	60,066	128,500	100.00%	0.00%									
Wet Manure Weight, Ton:	13	11	24				24							0.00%
N, DRY LBS	209	183	392					392						0.00%
P, DRY LBS	79	69	148						148					0.00%
K, DRY LBS	0	0	0							0				0.00%
Total coliform, x10 ¹⁰ cfu	0	0	0		0.00%						0			0.00%
Fecal coliform, x10 ¹⁰ cfu	335,327	294,464	629,790		0.00%							629,790		0.00%
Fecal streptococcus, x10 ¹⁰ cfu	0	0	0		0.00%								0	0.00%
Duck population, duck days in study area	55,015	112,886	167,900	100.00%	0.00%									
Wet Manure Weight, Ton:	6	12	18				18							0.00%
N, DRY LBS	165	339	504					504						0.00%
P, DRY LBS	59	122	181						181					0.00%
K, DRY LBS	78	160	238							238				0.00%
Total coliform, x10 ¹⁰ cfu	0	0	0		0.00%						0			0.00%
Fecal coliform, x10 ¹⁰ cfu	13,369	27,431	40,800		0.00%							40,800		0.00%
Fecal streptococcus, x10 ¹⁰ cfu	29,708	60,958	90,666		0.00%								90,666	0.00%
TOTAL UNITS, NONPOULTRY, WILDLIFE				TOTAL UNITS, NONPOULTRY, WILDLIFE										
Wet Manure Weight, Ton:	8,291	13,631	21,922				21,922							0.00%
N, DRY LBS	187,375	307,594	494,969					494,969						0.00%
P, DRY LBS	30,516	49,275	79,791						79,791					0.00%
K, DRY LBS	123,073	203,165	326,238							326,238				0.00%
Total coliform, x10 ¹⁰ cfu	0	0	0								0			0.00%
Fecal coliform, x10 ¹⁰ cfu	555,809	662,406	1,218,216									1,218,216		0.00%
Fecal streptococcus, x10 ¹⁰ cfu	29,708	60,958	90,666										90,666	0.00%
Layers 20 weeks old and older inventory, number	1,982,754	486,284	2,469,038	0.00%	100.00%	Note 3								
Wet Manure Weight, Ton:	90,858	22,283	113,141		20.50%		89,947							20.50%
N, LBS	2,385,016	584,941	2,969,957		66.00%			1,009,785						66.00%
P, LBS	851,791	208,908	1,060,699		0.00%				1,060,699					0.00%
K, LBS	851,791	208,908	1,060,699		0.00%					1,060,699				0.00%
Total coliform, x10 ¹⁰ cfu	141,965,217	34,817,929	176,783,146		50.00%						88,391,573			50.00%
Fecal coliform, x10 ¹⁰ cfu	9,653,635	2,367,619	12,021,254		50.00%							6,010,627		50.00%
Fecal streptococcus, x10 ¹⁰ cfu	21,010,852	5,153,053	26,163,906		50.00%								13,081,953	50.00%
Broilers and other meat type chickens sold, number	131,887,311	15,634,958	147,522,269	0.00%	100.00%	Note 3								
Wet Manure Weight, Ton:	617,974	73,260	691,234		31.25%		475,223							31.25%
N, LBS	15,994,634	1,896,130	17,890,763		38.00%			11,092,273						38.00%
P, LBS	4,362,173	517,126	4,879,299		0.00%				4,879,299					0.00%
K, LBS	5,816,230	689,502	6,505,732		0.00%					6,505,732				0.00%
Total coliform, x10 ¹⁰ cfu	0	0	0		50.00%						0			50.00%
Fecal coliform, x10 ¹⁰ cfu	87,889,058	10,419,059	98,308,117		50.00%							49,154,059		50.00%
Fecal streptococcus, x10 ¹⁰ cfu	0	0	0		50.00%								0	0.00%
Turkeys sold, number	512,089	157,364	669,453	0.00%	100.00%	Note 3				35261				
Wet Manure Weight, Ton:	27,077	8,321	35,397		0.40%		35,256							0.40%
N, LBS	714,364	219,523	933,888		46.00%			504,299						46.00%
P, LBS	265,006	81,436	346,442		0.00%				346,442					0.00%
K, LBS	276,528	84,977	361,505		0.00%					361,505				0.00%
Total coliform, x10 ¹⁰ cfu	0	0	0		50.00%						0			50.00%
Fecal coliform, x10 ¹⁰ cfu	714,364	219,523	933,888		50.00%							466,944		50.00%
Fecal streptococcus, x10 ¹⁰ cfu	0	0	0		50.00%								0	0.00%
TOTAL UNITS POULTRY				TOTAL UNITS POULTRY										
Wet Manure Weight, Ton:	735,909	103,864	839,773				600,426							28.50%
N, DRY LBS	19,094,013	2,700,594	21,794,608					12,606,358						42.16%
P, DRY LBS	5,478,970	807,470	6,286,440						6,321,701					-0.56%
K, DRY LBS	6,944,550	983,386	7,927,936							7,927,936				0.00%
Total coliform, x10 ¹⁰ cfu	141,965,217	34,817,929	176,783,146								88,391,573			50.00%
Fecal coliform, x10 ¹⁰ cfu	98,257,057	13,006,202	111,263,259									55,631,629		50.00%
Fecal streptococcus, x10 ¹⁰ cfu	21,010,852	5,153,053	26,163,906										13,081,953	50.00%
TOTAL FOR POULTRY AND NONPOULTRY				TOTAL FOR POULTRY AND NONPOULTRY										
Wet Manure Weight, Tons	2,220,340	621,898	3,334,449				2,888,998							13.36%
N, DRY LBS	36,668,297	8,850,210	51,340,670					39,386,953						23.28%
P, DRY LBS	10,348,917	2,794,168	15,169,210						15,204,471					-0.23%
K, DRY LBS	17,797,287	4,817,101	26,188,967							26,188,967				0.00%
Total coliform, x10 ¹⁰ cfu	2,401,975,591	2,345,360,447	4,747,336,038								4,272,333,118			10.01%
Fecal coliform, x10 ¹⁰ cfu	674,457,721	373,073,367	1,047,531,088									953,130,795		9.01%
Fecal streptococcus, x10 ¹⁰ cfu	1,827,811,488	1,410,174,333	3,237,985,821										2,164,863,687	33.14%

(Refer to Notes in Appendix G for additional detail.)

Note 1: On dairy cattle: A 49% reduction factor on the one-third of the manure that is piled outside barn and holding area and 50% reduction for the coliform and streptococcus estimates when applied. There is a 64.4% reduction in nitrogen on the one-third that is applied. There is no change in P-K that is applied.

Note 2: On swine: A 50% reduction factor on manure and coliform and streptococcus estimates because of the use of the lagoon when applied. There is a change in N of 54% reduction while P-K remained the same for what is applied.

Note 3: On poultry: For layers, a 20.5% reduction factor on manure, total coliform, fecal coliform, and fecal streptococcus because layering in house and composting outside of house while N is reduced by 66%. P, K are not reduced. For broilers, a 31.25% reduction factor on manure, 50% reduction factor in coliform and streptococcus estimates because of layering in house and composting outside of house while N is reduced by 38%. P, K are not reduced. For turkeys, a 5% reduction factor on manure, 50% reduction factor in coliform and streptococcus estimates because of layering in house and composting outside of house and N was reduced by 46%. P, K estimates are not reduced.